To: Technology Center 2600
Facsimile Number: 703-872-9306

Total Pages Sent: 6

From: Carlton H. Hoel
Texas Instruments Incorporated
Facsimile: 972-917-4418
Phone: 972-917-4365

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Ofir Shalvi et al.
Serial No: 09/493,526
Filed: 1/28/2000
Art Unit: 2631
Examiner: J. Corrielus
Docket No.: TI-30149
Conf. No.: 2369
Customer No.: 23494

CERTIFICATION OF FACSIMILE TRANSMISSION

I hereby certify that the following papers are being transmitted by facsimile to the U.S. Patent and Trademark Office at 703-872-9306 on the date shown below:

Gracia Sansom 7-5-05
Gracia Sansom Date

FACSIMILE COVER SHEET

X FACSIMILE COVER SHEET (1 SHEET)	___ AMENDMENT ___
___ NEW APPLICATION	___ EOT ___
___ DECLARATION	___ NOTICE OF APPEAL
___ ASSIGNMENT	X APPEAL SUPPL BRIEF (4 Pages)
___ FORMAL DRAWINGS	___ ISSUE FEE
___ INFORMAL DRAWINGS	___ REPLY BRIEF (IN TRIPLICATE)
___ CONTINUATION APP'N	X Request to Reinstate Appeal
___ DIVISIONAL APP'N	

NAME OF INVENTOR(S): Ofir Shalvi et al.	RECEIPT DATE & SERIAL NO.: Serial No.: 09/493,526 Filing Date: 1/28/2000 Conf. No.: 2369
TITLE OF INVENTION: Method for Combating Ingress and Impulse Noise Using Coded Modulation	
TI FILE NO.: TI-30149 / DEPOSIT ACCT. NO.: 20-0668	
FAXED: 07/05/2005 DUE: 07/05/2005 ATTY/SEC'Y: CHH/gs	

Texas Instruments Incorporated
PO Box 655474, M/S 3999
Dallas, TX 75265

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl.No.: 09/493,526 Confirmation No.: 2369
Applicant: Shalvi et al
Filed: January 28, 2000
TC/AU: 2631
Examiner: Corrielus

Docket: TI-30149
Cust.No.: 23494

REQUEST TO REINSTATE APPEAL

Commissioner for Patents
P.O.Box 1450
Alexandria VA 22313-1450

Sir:

Pursuant to Rule 193(b)(2)(ii) applicants request reinstatement of the appeal in this application; a supplemental appeal brief is enclosed.

The original notice of appeal was filed 11/08/2004 and the original appeal brief was filed 01/26/2005. Prosecution was reopened with the final rejection mailed 04/05/2005. The Commissioner is hereby authorized to charge any necessary fees to the deposit account of Texas Instruments Incorporated, account No. 20-0668

Respectfully submitted,

Carlton H. Hoel
Reg. No. 29,934
Texas Instruments Incorporated
PO Box 655474, M/S 3999
Dallas, Texas 75265
972.917.4365

JUL 0 5 2005

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Appl.No.:	09/493,526	Confirmation No.: 2369
Appellant:	Shalvi et al	
Filed:	January 28, 2000	
TC/AU:	2631	
Examiner:	Corrielus	
Docket:	TI-30149	
Cust.No.:	23494	

APPELLANTS' SUPPLEMENTAL BRIEF

Commissioner for Patents
P.O.Box 1450
Alexandria VA 22313-1450

Sir:

The attached sheets contain the Rule 41.37 items of appellants' supplemental brief. The fee for filing a brief in support of the appeal has already been paid. The Commissioner is hereby authorized to charge any other necessary fees to the deposit account of Texas Instruments Incorporated, account No. 20-0668.

Respectfully submitted,

Carlton H. Hoel
Reg. No. 29,934
Texas Instruments Incorporated
PO Box 655474, M/S 3999
Dallas, Texas 75265
972.917.4365

Rule 41.37(c)(1)(i) Real party of interest

Texas Instruments Incorporated owns the application.

Rule 41.37(c)(1)(ii) Related appeals and interferences

There are no related dispositive appeals or interferences.

Rule 41.37(c)(1)(iii) Status of claims

Claims 1-3 and 5 are pending in the application with claim 5 allowed and claims 1-3 finally rejected. This appeal involves the finally rejected claims.

Rule 41.37(c)(1)(iv) Status of amendments

There is no amendment after final rejection.

Rule 41.37(c)(1)(v) Summary of claimed subject matter

The invention provides a method of coding for upstream transmission in a digital cable system. Application page 4, lines 4-21 describes the coding. And application page 5, line 22 to page 6, line 21 plus Fig.3 illustrate a bit-wise scoring for soft (Viterbi-type) decoding.

Rule 41.37(c)(1)(vi) Grounds of rejection to be reviewed on appeal

The grounds of rejection to be reviewed on appeal are:

(1) claims 1-3 were rejected as anticipated by the Vijayan reference.

Rule 41.37(c)(1)(vii) Arguments

(1) Claims 1-3 were rejected as anticipated by Vijayan; the Examiner pointed to Vijayan Figs.2-3.

Appellants reply that claims 1-3 are limited to coding for upstream transmission in a cable system. In contrast, Vijayan applies to a wireless (air interface) system; see Vijayan column 4, lines 5-21. Because the problems that coding are to overcome for an upstream in a cable system differ from the problems of wireless systems, Vijayan does not anticipate claims 1-3. In

particular, the coding in Vijayan is to counter multipath fading problems of wireless systems; whereas, a cable system has no fading problems but rather impulse and burst noise problems; see Vijayan, column 2, lines 36-41 and the bottom two paragraphs of application page 1.

Rule 41.37(c)(1)(viii) Claims appendix

1. An encoder for a CATV upstream data channel transmitter, comprising:

a convolutional encoder for receiving data values, said convolutional encoder concatenated with an outer Reed-Solomon encoder;

a bit interleaver interconnected with said convolutional encoder; and

a symbol mapper interconnected with said bit-interleaver.

2. The encoder of claim 1, wherein said symbol mapper is a QAM mapper.

3. A system which comprises:

an encoder for a CATV upstream data channel transmitter, comprising:

a convolutional encoder for receiving data values, said convolutional encoder concatenated with an outer Reed-Solomon encoder;

a bit interleaver interconnected with said convolutional encoder; and

a symbol mapper interconnected with said bit interleaver; and

a bit-interleaved decoder for a CATV upstream channel receiver, comprising:

a scorer for receiving symbols;

a bit de-interleaver interconnected with said scorer; and

a convolutional decoder interconnected with said bit de-interleaver.

Rule 41.37(c)(1)(ix) Evidence appendix

N/A

Rule 41.37(c)(1)(x) Related proceedings appendix

N/A